

APPENDIX A

TABLE OF CONTENTS

Births ..... 119

Race/Ethnicity ..... 119

Validity of Vital Records Data..... 119

Confidentiality..... 119

Socioeconomic Status ..... 120

Federal Poverty Level..... 120

Medicaid..... 120

Kotelchuck Index ..... 120

Health Planning Areas of King County..... 121

The Four Regions of King County ..... 122

The National Infant Mortality Survey Classification of Causes of Infant Death ..... 123

The Infant Mortality Review Classification of Causes of Infant Death ..... 123

ICD-9 Codes for Perinatal Conditions as Underlying Cause of Death ..... 124

## **BIRTHS**

Information on births is collected through birth certificates by the Washington State Department of Health and Vital Statistics section at the Center for Health Statistics. Birth certificates include information on mother's age and race, as well as a variety of other subjects, varying by year of the birth, such as birthweight, mother's smoking status, method of delivery, method of payment for the delivery, census tract of mother's residence, and others. Birth rates are calculated through the combination of birth certificate and population estimates.

## **RACE/ETHNICITY**

We use the Federal Office of Management and Budget Directive 15 to define race and ethnicity. A person may belong to one of four racial groups: White, African American, Asian, or Native American. In addition, a person of any race may be identified as Hispanic.

## **VALIDITY OF VITAL RECORDS DATA**

The Washington State birth certificate has contained a check-box format for recording data since 1980, which has been shown to provide more complete reporting of birth complications. Frost et al., in 1984, estimated the completeness of reporting of selected birth complications and congenital malformation on the Washington State birth certificate by comparing the total occurrences reported on birth certificates to the totals reported in hospital records.<sup>1</sup> The authors reported a dramatic increase in reporting of pregnancy complications, such as C-Section, pre-eclampsia and breech presentation, upon adoption of the check box format. The rates improved from 33% to 90%, 50% to 97%, and 52% to 91%, respectively. This experience was validated by a Finish controlled trial that determined that forms with open-ended questions lacked information on 29% of the most common procedures versus only 9% for forms with a check-box format.<sup>2</sup> Additionally, Parrish et al. abstracted a sample of 7,536 hospital medical records to validate the accuracy of the coding of obstetric information on birth certificates, a statewide computerized hospital discharge abstract data system, and a linked file of birth certificates and the hospital abstract data for Washington State deliveries occurring in 1989.<sup>3</sup> The authors reported that 99.8% of women noted to have cesarean delivery recorded on birth certificates also had that delivery method noted on the hospital chart. It has been reported that the overall accuracy of information in the Washington State Birth Record is excellent, with an error rate of <4% as determined by comparison with hospital records.<sup>4</sup> Furthermore, over 40 studies using Washington State Birth Certificate data have been conducted through the University of Washington and the Fred Hutchinson Cancer Research Center, and published in peer reviewed journals, since 1984.

## **CONFIDENTIALITY**

Confidentiality and anonymity were maintained for each case in the review, in addition to the comparison group. All records with identifying information were locked in file cabinets accessible only to the infant mortality review team. Records were purged of identifying information and handled in an anonymous confidential manner when presented to the various committees for case review. Computer files were password protected and accessible only to the infant mortality review team. The project was approved through the University of Washington Human Subjects Review Board .

## SOCIOECONOMIC STATUS

Information on percent below poverty in census tracts was drawn from the 1990 U.S. Census. The federal poverty level (FPL) is a the household annual income level used to determine poverty status for statistical purposes and determining eligibility for programs targeting low-income families. The federal poverty level is adjusted for family size and composition and is keyed to the Consumer Price Index. In February, 1993, the Federal Poverty Level was as follows:

**TABLE A.1**  
**ANNUAL INCOME LEVEL FOR 100%, AND 185% FPL, FEBRUARY, 1993**

Family Size	100% FPL	185% FPL
1	\$6,972	\$12,900
2	\$9,432	\$17,448
3	\$11,892	\$21,996
4	\$14,352	<b>\$26,544</b>

## MEDICAID

Title XIX of the Social Security Act, known as Medicaid, became law in 1965. Medicaid provides health insurance for the economically disadvantaged in the United States. Individuals must meet certain eligibility criteria for Medicaid benefits, such as having to be on welfare, have dependent children, or receive the supplemental security income for the aged, blind, and disabled. Each state determines the eligibility criteria for welfare program participation. Therefore, eligibility for the Medicaid program is controlled principally by the state. However, the federal government establishes guidelines that must be met before federal funds are made available.

## KOTELCHUCK INDEX

The Kotelchuck Index measures the adequacy of the initiation and quantity of prenatal care visits. This index considers initiation of prenatal care, number of prenatal care visits and gestational age in determining an Expected Visit Ratio [(number of visits/expected visits)\*100]. If this ratio is 0, then no prenatal care was received. A ratio of <50% means inadequate prenatal care, ≥50-<80% means intermediate, ≥80-<110% means adequate, and ≥110% means more than adequate prenatal care.

## HEALTH PLANNING AREAS OF KING COUNTY

Health Planning Areas as defined by the Seattle-King County Health Department are used for small-area analysis in this report. Below is a list of the census tracts that are aggregated into each Health Planning Area:

Auburn:	296.00, 298.02, 299.00, 304.00 - 312.02
Bellevue:	230.00 - 242.00
Bothell/Woodinville:	217.00 - 219.01, 220.01, 221.00, 323.01, 323.02
Central Seattle:	75.00, 77.00 - 92.00
East/Northeast County:	324.00 - 330.00
Eastgate/Issaquah:	247.00 - 250.00, 321.01 - 322.02
Federal Way:	300.01 - 303.04
Highline/Burien:	262.00, 276.00, 278.00 - 282.00, 284.01 - 290.00
Kent:	283.00, 291.00 - 295.00, 297.00, 298.01
Kirkland/Redmond:	219.02, 220.02, 222.00 - 229.00, 323.03 - 323.05
Mercer Island:	243.00 - 246.00
North Central Seattle:	55.00 - 74.00, 76.00
North County:	201.00 - 216.00
North of Canal Area:	15.00 - 54.00
North Seattle:	1.00 - 14.00
Renton:	251.00 - 259.00, 319.01, 319.02
Southeast County:	313.00 - 318.00, 320.01 - 320.03, 331.00
Southeast Seattle:	89.00, 90.00, 93.00 - 95.00, 100.00 - 104.00, 109.00 - 112.00, 117.00 - 119.00
Vashon Island:	277.01, 277.02
West Seattle:	96.00 - 99.00, 105.00 - 108.00, 113.00 - 116.00, 120.00, 121.00
White Center/Skyway:	260.01 - 261.00, 263.00 - 275.00

## **FOUR REGIONS OF KING COUNTY**

The Health Planning Areas of King County can be aggregated into four major groups. These regions consist of the following areas:

### **EAST KING COUNTY**

- Bothell/Woodinville
- Kirkland/Redmond
- Bellevue
- Mercer Island
- Eastgate/Issaquah
- East/Northeast County

### **SOUTH KING COUNTY**

- White Center/Skyway
- Renton
- Kent
- Auburn
- Federal Way
- Highline/Burien

### **NORTH KING COUNTY/NORTH SEATTLE**

- North of Canal Area
- North County
- North Seattle,
- North Central Seattle

### **SOUTH SEATTLE**

- West Seattle
- Southeast Seattle
- Central Seattle

## THE NATIONAL INFANT MORTALITY SURVEY CLASSIFICATION OF CAUSES OF INFANT DEATH

The National Infant Mortality Survey (NIMS) classified infant's causes of death into 11 categories, based on the International Classification of Diseases, 9th revision, (ICD-9) <sup>5</sup>. These categories were:

1. Prematurity/low birthweight
2. Respiratory distress syndrome/bronchopulmonary dysplasia
3. Other perinatal respiratory
4. Birth trauma, hypoxia, asphyxia
5. Other perinatal conditions (excluding perinatal infections)
6. Infections:
  - a. Perinatal infections
  - b. Other infections
7. Congenital anomalies
8. External causes
9. Sudden Infant Death Syndrome (SIDS)
10. Nonspecific (includes cardiac/respiratory arrest) and unknown causes
11. All others

## THE INFANT MORTALITY REVIEW CLASSIFICATION OF CAUSES OF INFANT DEATH

We regrouped the NIMS categories of causes of infant death into 7 groups in order to simplify analysis. These groups were:

1. Prematurity (including prematurity, low birthweight, respiratory distress syndrome, bronchopulmonary dysplasia, and necrotizing enterocolitis)
2. SIDS
3. Congenital anomalies
4. Perinatal conditions [including other perinatal respiratory, birth trauma, hypoxia, perinatal/neonatal asphyxia, other perinatal conditions (excluding perinatal infections), and perinatal infections].
5. Other infections (e.g., pneumonia, meningitis)
6. External causes (e.g., positional/accidental asphyxia, motor vehicle accident, trauma, burns, etc.)
7. Other miscellaneous (e.g., cardiac arrhythmia, cardiopulmonary arrest, and umbilical cord compression)

Respiratory distress syndrome and bronchopulmonary dysplasia have been merged with prematurity/low birth weight group, since respiratory distress syndrome and bronchopulmonary dysplasia almost always occur due to prematurity. Separating these two illnesses from the prematurity group will underestimate the number of infants who died due to prematurity. A new group has been formed, namely “perinatal conditions”, which combined other perinatal respiratory, such as meconium aspiration pneumonia, birth trauma, hypoxia, and birth asphyxia (including perinatal/neonatal asphyxia), other perinatal conditions, and perinatal infections groups. All of these categories occurred in the peri/neonatal period. Additionally, joining these categories ensured a larger number, so that meaningful conclusions could be made. Both groups of all others and nonspecific causes of death have been merged together into an “other miscellaneous group”, since no specific cause of death was identified and to ensure adequate number for analysis.

## THE NATIONAL INFANT MORTALITY SURVEY CLASSIFICATION OF CAUSES OF INFANT DEATH

The ICD-9 Codes included in each NIMS cause-of-death group are listed in this section.

### A) OTHER PERINATAL RESPIRATORY

<b>770</b>	<b>Other respiratory conditions of the fetus and newborn</b>
770.0	CONGENITAL PNEUMONIA - Infective pneumonia acquired prenatally (excludes pneumonia from infection acquired after birth)
770.1	MECONIUM ASPIRATION SYNDROME - Aspiration of contents of birth canal.
770.2	INTERSTITIAL EMPHYSEMA AND RELATED CONDITIONS - pneumomediastinum, pneumopericardium, pneumothorax - originating in the perinatal period.
770.3	PULMONARY HEMORRHAGE - hemorrhage: alveolar (lung); intra-alveolar (lung); massive pulmonary - originating in the perinatal period.
770.5	OTHER AND UNSPECIFIED ATELECTASIS - partial, secondary Pulmonary collapse (originating in the perinatal period)
770.6	TRANSITORY TACHYPNEA OF NEWBORN - Idiopathic tachypnea of newborn , Wet lung syndrome.
770.8	OTHER RESPIRATORY PROBLEMS AFTER BIRTH - apneic spells, Cyanotic attacks, Respiratory distress, Resp failure (originating in the perinatal period)
770.9	UNSPECIFIED RESPIRATORY CONDITION OF FETUS AND NEWBORN

## **B) BIRTH TRAUMA, HYPOXIA, ASPHYXIA**

### **763 Fetus or newborn affected by other complications of labor and delivery**

- 763.0 BREECH DELIVERY AND EXTRACTION
- 763.1 OTHER MALPRESENTATION, MALPOSITION & DISPROPORTION DURING LABOR & DELIVERY - Fetus or newborn affected by: Abnormality of bony pelvis, contracted pelvis, persistent occipitoposterior position, shoulder presentation, transverse lie.
- 763.2 FORCEPS DELIVERY
- 763.3 DELIVERY BY VACUUM EXTRACTION
- 763.4 CESAREAN DELIVERY
- 763.5 MATERNAL ANESTHESIA & ANALGESIA - Reactions and intoxications from maternal opiates and tranquilizers during labor and delivery (excludes drug withdrawal syndrome in newborn)
- 763.6 PRECIPITATE DELIVERY - Rapid 2nd Stage
- 763.7 ABNORMAL UTERINE CONTRACTIONS - fetus or newborn affected by: contraction ring, hypertonic labor, hypotonic uterine dysfunction, uterine inertia or dysfunction.
- 763.8 OTHER SPECIFIED COMPLICATIONS OF LABOR AND DELIVERY AFFECTING FETUS OR NEWBORN - Fetus or newborn affected by: abnormality of maternal soft tissues, destructive operation on live fetus to facilitate delivery, induction of labor (medical), previous surgery to uterus or pelvic organs, other procedures used in labor and delivery
- 763.9 UNSPECIFIED COMPLICATION OF LABOR AND DELIVERY AFFECTING FETUS OR NEWBORN

### **767 Birth Trauma**

- 767.0 SUBDURAL AND CEREBRAL HEMORRHAGE
- 767.1 INJURIES TO SCALP
- 767.2 FRACTURE OF CLAVICLE
- 767.3 OTHER INJURIES TO SKELETON
- 767.4 INJURY TO SPINE AND SPINAL CORD
- 767.5 FACIAL NERVE INJURY
- 767.6 INJURY TO BRACHIAL PLEXUS
- 767.7 OTHER CRANIAL AND PERIPHERAL NERVE INJURIES
- 767.8 OTHER SPECIFIED BIRTH TRAUMA
- 767.9 BIRTH TRAUMA, UNSPECIFIED



**768 Intrauterine hypoxia and birth asphyxia**

768.0	FETAL DEATH FROM ASPHYXIA OR ANOXIA BEFORE ONSET OF LABOR OR AT UNSPECIFIED TIME
768.1	FETAL DEATH FROM ASPHYXIA OR ANOXIA DURING LABOR
768.2	FETAL DISTRESS BEFORE ONSET OF LABOR, IN LIVEBORN INFANT
768.3	FETAL DISTRESS FIRST NOTED DURING LABOR, IN LIVEBORN INFANT
768.4	FETAL DISTRESS, UNSPECIFIED AS TO TIME OF ONSET, IN LIVEBORN INFANT
768.5	SEVERE BIRTH ASPHYXIA.
768.6	MILD OR MODERATE BIRTH ASPHYXIA
768.9	UNSPECIFIED BIRTH ASPHYXIA IN LIVEBORN INFANT

**C) OTHER PERINATAL CONDITIONS (EXCLUDING PERINATAL INFECTION)****760 Fetus or newborn affected by maternal conditions which may be unrelated to present pregnancy**

760.0	MATERNAL HYPERTENSIVE DISORDERS
760.1	MATERNAL RENAL AND URINARY TRACT DISEASES
760.3	OTHER CHRONIC MATERNAL CIRCULATORY AND RESPIRATORY DISEASES
760.4	MATERNAL NUTRITIONAL DISORDERS
760.5	MATERNAL INJURY
760.6	SURGICAL OPERATION ON MOTHER
760.7	NOXIOUS INFLUENCES AFFECTING FETUS VIA PLACENTA OR BREAST MILK
760.70	UNSPECIFIED NOXIOUS SUBSTANCE
760.71	ALCOHOL
760.72	NARCOTICS
760.73	HALLUCINOGENIC AGENTS
760.74	ANTI-INFECTIVES
760.75	COCAINE
760.76	DIETHYLSTILBESTROL (DES)
760.79	OTHER - Fetus or newborn affected by immune sera, medicinal agents, toxic substance (transmitted via placenta or breast milk)
760.8	OTHER SPECIFIED MATERNAL CONDITIONS AFFECTING FETUS OR NEWBORN
760.9	UNSPECIFIED MATERNAL CONDITIONS AFFECTING FETUS OR NEWBORN

<b>761</b>	<b>Fetus or newborn affected by maternal complications of pregnancy</b>
761.0	INCOMPETENT CERVIX
761.1	PREMATURE RUPTURE OF MEMBRANES
761.2	OLIGOHYDRAMNIOS
761.3	POLYHYDRAMNIOS
761.4	ECTOPIC PREGNANCY
761.5	MULTIPLE PREGNANCY
761.6	MATERNAL DEATH
761.7	MALPRESENTATION BEFORE LABOR
761.8	OTHER SPECIFIED MATERNAL COMPLICATIONS OF PREGNANCY AFFECTING FETUS OR NEWBORN
761.9	UNSPECIFIED MATERNAL COMPLICATION OF PREGNANCY AFFECTING FETUS OR NEWBORN
<b>762</b>	<b>Fetus or newborn affected by complications of placenta, cord, and membranes</b>
762.0	PLACENTA PREVIA
762.1	OTHER FORMS OF PLACENTAL SEPARATION AND HEMORRHAGE
762.2	OTHER AND UNSPECIFIED MORPHOLOGICAL AND FUNCTIONAL ABNORMALITIES OF PLACENTA
762.3	PLACENTAL TRANSFUSION SYNDROMES
762.4	PROLAPSED CORD
762.5	OTHER COMPRESSION OF UMBILICAL CORD
762.6	OTHER AND UNSPECIFIED CONDITIONS OF UMBILICAL CORD
762.7	CHORIOAMNIONITIS
762.8	OTHER SPECIFIED ABNORMALITIES OF CHORION AND AMNION
762.9	UNSPECIFIED ABNORMALITY OF CHORION AND AMNION
<b>766</b>	<b>Disorders relating to long gestation and high birthweight</b>
766.0	EXCEPTIONALLY LARGE BABY (BIRTHWEIGHT > OR = 4500 GRAMS)
766.1	OTHER "HEAVY -FOR-DATES" INFANTS
766.2	POST-TERM INFANT, NOT "HEAVY -FOR-DATES"
<b>772</b>	<b>Fetal and neonatal hemorrhage</b>
772.0	FETAL BLOOD LOSS
772.1	INTRAVENTRICULAR HEMORRHAGE
772.2	SUBARACHNOID HEMORRHAGE
772.3	UMBILICAL HEMORRHAGE AFTER BIRTH
772.4	GASTROINTESTINAL HEMORRHAGE
772.5	ADRENAL HEMORRHAGE
772.6	CUTANEOUS HEMORRHAGE
772.8	OTHER SPECIFIED HEMORRHAGE OF FETUS OR NEWBORN
772.9	UNSPECIFIED HEMORRHAGE OF NEWBORN

<b>773</b>	<b>Hemolytic disease of fetus or newborn, due to isoimmunization</b>
773.1	HEMOLYTIC DISEASE DUE TO ABO ISOIMMUNIZATION
773.2	HEMOLYTIC DISEASE DUE TO OTHER AND UNSPECIFIED ISOIMMUNIZATION
773.3	HYDROPS FETALIS DUE TO ISOIMMUNIZATION
773.4	KERNICTERUS DUE TO ISOIMMUNIZATION
773.5	LATE ANEMIA DUE TO ISOIMMUNIZATION
<b>774</b>	<b>Other perinatal jaundice</b>
774.0	PERINATAL JAUNDICE FROM HEREDITARY HEMOLYTIC ANEMIAS
774.1	PERINATAL JAUNDICE FROM OTHER EXCESSIVE HEMOLYSIS
774.2	NEONATAL JAUNDICE ASSOCIATED WITH PRETERM DELIVERY
774.3	NEONATAL JAUNDICE DUE TO DELAYED CONJUGATION FROM OTHER CAUSES
774.30	NEONATAL JAUNDICE DUE TO DELAYED CONJUGATION, CAUSE UNSPECIFIED
774.31	NEONATAL JAUNDICE DUE TO DELAYED CONJUGATION IN DISEASES CLASSIFIED ELSEWHERE
774.39	OTHER
774.4	PERINATAL JAUNDICE DUE TO HEPATOCELLULAR DAMAGE
774.5	PERINATAL JAUNDICE FROM OTHER CAUSES
774.6	UNSPECIFIED FETAL AND NEONATAL JAUNDICE
774.7	KERNICTERUS NOT DUE TO ISOIMMUNIZATION
<b>775</b>	<b>Endocrine and metabolic disturbances specific to the fetus and newborn</b>
775.0	SYNDROME OF “INFANT OF A DIABETIC MOTHER”
775.1	NEONATAL DIABETES MELLITUS
775.2	NEONATAL MYASTHENIA GRAVIS
775.3	NEONATAL THYROTOXICOSIS
775.4	HYPOCALCEMIA AND HYPOMAGNESEMIA OF NEWBORN
775.5	OTHER TRANSITORY NEONATAL ELECTROLYTE DISTURBANCES
775.6	NEONATAL HYPOGLYCEMIA
775.7	LATE METABOLIC ACIDOSIS OF NEWBORN
775.8	OTHER TRANSITORY NEONATAL ENDOCRINE AND METABOLIC DISTURBANCES
775.9	UNSPECIFIED ENDOCRINE AND METABOLIC DISTURBANCES SPECIFIC TO THE FETUS AND NEWBORN

**776 Hematological disorders of fetus and newborn**

- 776.0 HEMORRHAGIC DISEASE OF NEWBORN
- 776.1 TRANSIENT NEONATAL THROMBOCYTOPENIA
- 776.2 DISSEMINATED INTRAVASCULAR COAGULATION IN NEWBORN
- 776.3 OTHER TRANSIENT NEONATAL DISORDERS OF COAGULATION
- 776.4 POLYCYTHEMIA NEONATORUM
- 776.5 CONGENITAL ANEMIA
- 776.6 ANEMIA OF PREMATURITY
- 776.7 TRANSIENT NEONATAL NEUTROPENIA
- 776.8 OTHER SPECIFIED TRANSIENT HEMATOLOGICAL DISORDERS
- 776.9 UNSPECIFIED HEMATOLOGICAL DISORDER SPECIFIC TO FETUS OR NEWBORN

**777 Perinatal disorders of digestive system**

- 777.1 MECONIUM OBSTRUCTION
- 777.2 INTESTINAL OBSTRUCTION DUE TO INSPISSATED MILK
- 777.3 HEMATEMESIS AND MELENA DUE TO SWALLOWED MATERNAL BLOOD
- 777.4 TRANSITORY ILEUS OF NEWBORN
- 777.5 NECROTIZING ENTEROCOLITIS IN FETUS OR NEWBORN
- 777.6 PERINATAL INTESTINAL PERFORATION
- 777.8 OTHER SPECIFIED PERINATAL DISORDERS OF DIGESTIVE SYSTEM
- 777.9 UNSPECIFIED PERINATAL DISORDER OF DIGESTIVE SYSTEM

**778 Conditions involving the integument and temperature regulation of fetus and newborn**

- 778.0 HYDROPS FETALIS NOT DUE TO ISOIMMUNIZATION
- 778.1 SCLEREMA NEONATORUM
- 778.2 COLD INJURY SYNDROME OF NEWBORN
- 778.3 OTHER HYPOTHERMIA OF NEWBORN
- 778.4 OTHER DISTURBANCES OF TEMPERATURE REGULATION OF NEWBORN
- 778.5 OTHER AND UNSPECIFIED EDEMA OF NEWBORN
- 778.6 CONGENITAL HYDROCELE
- 778.7 BREAST ENGORGEMENT IN NEWBORN
- 778.8 OTHER SPECIFIED CONDITIONS INVOLVING THE INTEGUMENT OF FETUS AND NEWBORN
- 778.9 UNSPECIFIED CONDITION INVOLVING THE INTEGUMENT AND TEMPERATURE REGULATION OF FETUS AND NEWBORN

**779 Other and ill-defined conditions originating in the perinatal period**

779.0	CONVULSIONS IN NEWBORN
779.1	OTHER AND UNSPECIFIED CEREBRAL IRRITABILITY IN NEWBORN
779.2	CEREBRAL DEPRESSION, COMA, AND OTHER ABNORMAL CEREBRAL SIGNS
779.3	FEEDING PROBLEMS IN NEWBORN
779.4	DRUG REACTION AND INTOXICATIONS SPECIFIC TO NEWBORN
779.5	DRUG WITHDRAWAL SYNDROME IN NEWBORN
779.6	TERMINATION OF PREGNANCY (FETUS)
779.8	OTHER SPECIFIED CONDITIONS ORIGINATING IN THE PERINATAL PERIOD
779.9	UNSPECIFIED CONDITION ORIGINATING IN THE PERINATAL PERIOD

**D) PERINATAL INFECTIONS**

760.2	MATERNAL INFECTIONS - Fetus or newborn affected by maternal infectious disease classifiable to 001-136 and 487, but fetus or newborn not manifesting that disease. Excludes congenital infectious diseases (771.0-771.8); maternal genital tract and other localized infections (760.8)
-------	---

**771 Infections specific to the perinatal period**

771.0	CONGENITAL RUBELLA
771.1	CONGENITAL CYTOMEGALOVIRUS INFECTION
771.2	OTHER CONGENITAL INFECTIONS
771.3	TETANUS NEONATORUM
771.4	OMPHALITIS OF THE NEWBORN
771.5	NEONATAL INFECTIVE MASTITIS
771.6	NEONATAL CONJUNCTIVITIS AND DACRYOCYSTITIS
771.7	NEONATAL CANDIDA INFECTION
771.8	OTHER INFECTION SPECIFIC TO THE PERINATAL PERIOD

**E) EXTERNAL CAUSES (INJURY AND POISONING )**

800-829	FRACTURES
830-839	DISLOCATIONS
840-848	SPRAINS AND STRAINS OF JOINTS AND ADJACENT MUSCLES
850-854	INTRACRANIAL INJURY, EXCLUDING THOSE WITH SKULL FRACTURE
860-869	INTERNAL INJURY OF THORAX, ABDOMEN, AND PELVIS
870-879	OPEN WOUND OF HEAD, NECK AND TRUNK
880-887	OPEN WOUND OF UPPER LIMB
890-897	OPEN WOUND OF LOWER LIMB
900-904	INJURY TO BLOOD VESSELS
905-909	LATE EFFECTS OF INJURIES, POISONINGS, TOXIC EFFECTS, AND OTHER EXTERNAL CAUSES
910-919	SUPERFICIAL INJURY
920-924	CONTUSION WITH INTACT SKIN SURFACE
925-929	CRUSHING INJURY
930-939	EFFECTS OF FOREIGN BODY ENTERING THROUGH ORIFICE
940-949	BURNS
950-957	INJURY TO NERVES AND SPINAL CORD
958-959	CERTAIN TRAUMATIC COMPLICATIONS AND UNSPECIFIED INJURIES
960-979	POISONING BY DRUGS, MEDICINAL AND BIOLOGICAL SUBSTANCES
980-989	TOXIC EFFECTS OF SUBSTANCES CHIEFLY NONMEDICINAL AS TO SOURCE
990-995	OTHER AN UNSPECIFIED EFFECTS OF EXTERNAL CAUSES
996-999	COMPLICATIONS OF SURGICAL AND MEDICAL CARE, NOT ELSEWHERE CLASSIFIED

## **F) SUPPLEMENTARY CLASSIFICATION OF EXTERNAL CAUSES OF INJURY AND POISONING (E800-E999)**

E800-E848	TRANSPORT ACCIDENTS (Railway, Motor Vehicle, Watercraft, Aircraft and Spacecraft, and Other Road Vehicles)
E849	PLACE OF OCCURRENCE (Place where the accident or poisoning occurred)
E850-E858	ACCIDENTAL POISONING BY ANALGESICS, ANTIPYRETICS, AND ANTIRHEUMATICS
E860-E869	ACCIDENTAL POISONING BY OTHER SOLID AND LIQUID SUBSTANCES, GASES, AND VAPORS
E870-E876	MISADVENTURES TO PATIENTS DURING SURGICAL AND MEDICAL CARE
E878-E879	SURGICAL AND MEDICAL PROCEDURES AS THE CAUSE OF ABNORMAL REACTION OF PATIENT OR LATER COMPLICATION, WITHOUT MENTION OF MISADVENTURE AT THE TIME OF PROCEDURE
E880-E888	ACCIDENTAL FALLS
E890-E899	ACCIDENTS CAUSED BY FIRE AND FLAMES
E900-E909	ACCIDENTS DUE TO NATURAL AND ENVIRONMENTAL FACTORS
E910-E915	ACCIDENTS CAUSED BY SUBMERSION, SUFFOCATION, AND FOREIGN BODIES
E916-E928	OTHER ACCIDENTS
E929	LATE EFFECTS OF ACCIDENTAL INJURY
E930-E949	DRUGS, MEDICINAL AND BIOLOGICAL SUBSTANCES CAUSING ADVERSE EFFECTS IN THERAPEUTIC USE
E950-E959	SUICIDE AND SELF-INFLICTED INJURY
E960-E969	HOMICIDE AND INJURY PURPOSELY INFLICTED BY OTHER PERSONS
E970-E978	LEGAL INTERVENTION
E980-E989	INJURY UNDETERMINED WHETHER ACCIDENTALLY OR PURPOSELY INFLICTED
E990-E999	INJURY RESULTING FROM OPERATIONS OF WAR

## **G) NONSPECIFIC (INCLUDES CARDIAC/RESPIRATORY ARREST) AND UNKNOWN CAUSES**

427.5	CARDIAC ARREST
798.2	DEATH OCCURRING IN LESS THAN 24 HRS FROM ONSET OF SYMPTOMS, NOT OTHERWISE EXPLAINED
798.9	UNATTENDED DEATH
799.8	OTHER ILL-DEFINED CONDITIONS
799.9	OTHER UNKNOWN AND UNSPECIFIED CAUSE

## H) OTHER INFECTIONS

1.00-139.8	INFECTIOUS AND PARASITIC DISEASES - Such as Cholera, Candidiasis, and Herpes Zoster
320-383.9	DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS - Such as Bacterial Meningitis, Conjunctivitis, and Otitis Media
420.0-422.9	DISEASES OF THE CIRCULATORY SYSTEM - Such as Acute Pericarditis, Acute and Subacute Endocarditis, and Acute Myocarditis
460-513.1	DISEASES OF THE RESPIRATORY SYSTEM - Such as Acute Sinusitis, Peritonsillar Abscess, and Viral Pneumonia
566.0-577.0	DISEASES OF THE DIGESTIVE SYSTEM - Such as Peritonitis, Diseases of Pancreas, and Other Disorders of Liver
590.0-595.0	DISEASES OF THE GENITOURINARY SYSTEM - Such as Infections of Kidney and Cystitis
680.0-686.9	DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE Such as Acute Lymphadenitis., Cellulitis, and Impetigo
711.0-730.9	DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE - Such as Arthropathy associated with infection, Infective Myositis, and Osteomyelitis, periostitis, and other infections involving bone
790.7-790.8	SYMPTOMS, SIGNS AND ILL-DEFINED CONDITIONS - Such as Bacteremia, Viremia, unspecified, and Abnormality of red blood cells

---

## REFERENCES

- <sup>1</sup> Frost F, Starzyk P, George S, et al.: Birth complication reporting: The effect of birth certificate design. Am J Public Health 1984; 74:505-6.
- <sup>2</sup> Teperi J, Makela M, and Hemminki E: Controlled trial on medical birth notification design. Meth Inform Med 1991; 30:124-126.
- <sup>3</sup> Parrish KM, Holt VL, Connell FA, et al.: Variations in the accuracy of obstetric procedures and diagnosis on birth records in Washington State, 1989. Am J Epidemiol 1993; 138:119-27.
- <sup>4</sup> Hickok DE, Gordon DC, Milberg JA, et al.: The frequency of breech presentation by gestational age at birth: A large population-based study. Am J Obstet Gynecol 1992; 166:851-2.
- <sup>5</sup> Centers for Disease Control and Prevention:.. Advance report of final mortality statistics, 1990. Monthly Vital Statistics Report 1993; 41(7)suppl:9-11, and Table 9.